

## Another Two New Fleas from Tanzania

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During May of 1965 a week was spent at the 6,000 foot elevation of the Western Usambara Mountains in north-east Tanzania, at the old German saw mill town of Shume, about 20 miles north-west, by road, from Lushoto. Shume is a ghost town now for the primival forest has long since been logged off and the reforested pine is not yet ready to harvest. It was at the foot of these young pine trees that six small black shrews were taken in small live catch box traps. Dr. J. Meester, shrew specialist at Transvaal Museum identified them as *Crocidura nigricans*, a shrew not before recorded from Tanzania. The shrews carried four fleas of the species *Ctenophthalmus particularis* described by Berteaux from the Kivu area of the Congo. In 1963 the writer separated the Njombe, Tanzania, form and named it *C. p. hopkinsi*. At that time the writer had four females of the flea from Shume which did not seem different from the Njombe form. However, when there were two males in the new Shume material the series was sent to Frans Smit of the British Museum who checked them against the types of *C. p. hopkinsi* and proclaimed them different. The new flea shall be called:

### *Ctenophthalmus particularis smiti* n. ssp.

According to Smit, although 500 miles separates the type localities the females are inseparable but in the males the apical outline of the VIII St. is distinct, that of *C. p. hopkinsi* having a slight bay while *C. p. smiti* has a deep bay low down which causes the lower lobe to look like a finger-like appendage. Further, the postero-ventral angle of the process of the clasper of *C. p. hopkinsi* is flat while that of *C. p. smiti* is indented.

The holotype male and allotype female are on separate slides bearing the writer's number T2401, dated May 21, 1965, with type locality as Shume, Tanzania, and type host as *Crocidura*

*nigricans* and are deposited in the Rothschild Collection of the British Museum. All paratypes are in the U. S. National Museum.

This flea bears the name of Frans Smit, custodian of the Rothschild Collection of Fleas of the British Museum. The original British Duo, Jordan and Rothschild, have long since passed beyond, leaving in their chairs and atmosphere younger Frans Smit and older Harry Hopkins, present day world authorities on fleas, to carry on. For all time their names will be carried by these closely related fleas found on the opposite sides of Tanzania.

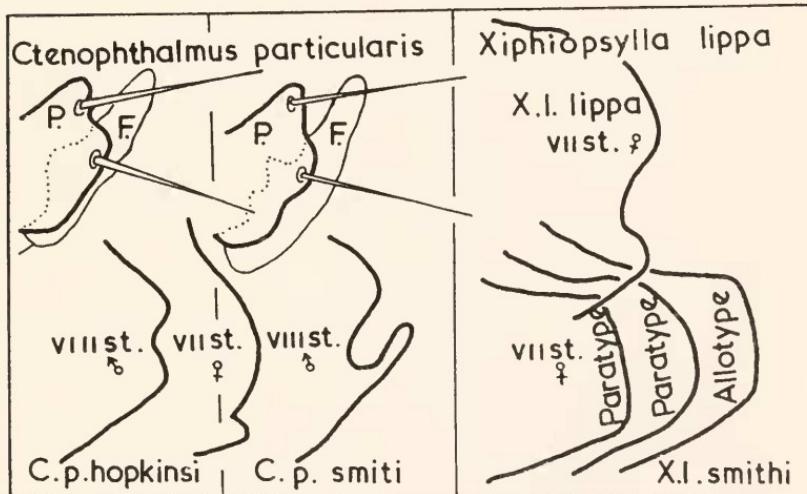
On August 27, 1965, a few days were spent about Ngorongoro Crater in north-central Tanzania. Here several specimens of *Lophuromys f. aquilus* were taken about the Michael Grzimek monument at the 8,000 foot level of the Rim. From two of these there was removed a female each of a flea similar to *Xiphioipsylla lippa* Jordan 1933, but with apical outline of VII St. quite different. The flea which is described here as new shall be called:

***Xiphioipsylla lippa smithi* n. spp.**

There are before the writer at this time and all from Ngorongoro Crater Rim: Holotype male off *Pelomys fallax* (Creek Rat), Jan. 22, 1963, No. T1760. Allotype female off *Mus triton* (Pigmy Mouse), Oct. 2, 1962, No. T1108. Paratypes, 2 females off *Lophuromys f. aquilus* (Chocolate Brown Mouse), Aug. 27, 1965, No. T2921.

When these are compared with the original description of *X. lippa* the males seem to be inseparable. But in females the original illustration of the apical outline of the VII St. of *X. lippa* has a broad upper lobe and small lower lobe with a noticeable bay between whereas in *X. l. smithi* the apical outline is a single nicely rounded lobe without a bay and slightly flattened along the posterior border. This new flea is probably vicarious, perhaps slightly favoring *Lophuromys* as a host. The type slides are deposited in the Rothschild Collection, the paratypes in the U. S. National Museum.

This flea bears the name of Robert Smith, Scotsman from Aberdeen, who for some years has been superintendent of Buildings and Grounds at the Malaria Institute, and who has been invaluable to the writer in designing and allowing his crews to build and maintain the writer's field and laboratory equipment. It was through Mr. Smith's thoughtfulness that the only specimens of the elephant shrew fleas *Chimaeropsylla potis potis* Rothschild 1911 and *Chimaeropsylla haddowi* Smit 1960 came to the writer's hands. Smith's dog had cornered and held for Smith, in his back yard, the first specimen of the Red



and Black Elephant shrew *Rhynchocyon petersi fisheri* Newmann that had been seen in the vicinity for years and when it was delivered by Smith to the writer in a polythene bag it was with its compliment of 24 fleas, 12 each of the above named, including the first 6 females of the latter to be known and from which the writer described the female.

This is the eighth paper to be written and published by the writer under U. S. National Science Foundation grant GB1954 and the two fleas here described as new bring to 16, the number of new ones he has named from Tanzania.